

Noise pollution makes us oblivious to the sound of nature

Level 3 • Advanced

1 Warmer

Close your eyes for 30 seconds and listen to all the sounds around you. Then, take a minute to make notes about everything you heard.

Compare your notes with other students. Did you all identify the same sounds?

2 Key words

a. Read the definitions and find the words in the article.

b. Mark the main stressed syllable on each key word.

1. calm, still and quiet _____
2. stop noticing; block out _____ (two words)
3. not notice _____ (two words)
4. made worse _____
5. training to behave in a certain way _____
6. a medical condition that makes you unable to remember things _____
7. the ability to see or think very clearly and quickly _____
8. not planned or prepared _____
9. put in various places in or among something else _____
10. considers why something has happened or what might happen _____
11. an animal that hunts, kills and eats other animals _____
12. crowded with things and untidy _____

Noise pollution makes us oblivious to the sound of nature

Level 3 • Advanced

Noise pollution is making us oblivious to the sound of nature, says researcher

Gift of hearing birdsong and trickling water is being lost to a process of 'learned deafness', says US scientist, as people screen out background noise

Ian Sample, science editor, in San Jose
17 February, 2015

- 1 The tranquil chorus of the natural world is in danger of being lost to today's generation as people screen out the noises that surround them, a senior US researcher warns.
- 2 Rising levels of background noise in some areas threaten to make people oblivious to the uplifting sounds of birdsong, trickling water and trees rustling in the wind, which can often be heard even in urban centres, said Kurt Fristrup, a senior scientist at the US National Park Service.
- 3 The problem was exacerbated by people listening to music through their earphones instead of tuning in to the birds and other sounds of nature that can easily be drowned out by traffic, music and other noises, he said.
- 4 "This learned deafness is a real issue," Fristrup told the American Association for the Advancement of Science meeting in San Jose. "We are conditioning ourselves to ignore the information coming into our ears."
- 5 "This gift that we are born with – to reach out and hear things hundreds of metres away, all these incredible sounds – is in danger of being lost through a generational amnesia," he said.
- 6 "There is a real danger, both of loss of auditory acuity, where we are exposed to noise for so long that we stop listening, but also a loss of listening habits, where we lose the ability to engage with the environment the way we were built to," he added.
- 7 For the past ten years, the US National Park Service has recorded sound levels at more than 600 sites across the US, including Yosemite in California, Yellowstone and Denali in Alaska. Not one was unaffected by some form of noise from human activity, be it over-flying aircraft, motorbikes, motorboats or tour buses.
- 8 Fristrup's team combined the sound levels recorded from national parks with similar data from urban settings to create a model of noise levels across the US. They predict that noise pollution is growing faster than the US population and more than doubles every 30 years.
- 9 "It's not surprising people are putting on earphones or even noise cancelling headphones to try and create a quieter or more congenial environment," he said.
- 10 "As you raise background sound levels, it has the same effect on your hearing that fog would have on your vision. Instead of having this expansive experience of all the sounds around you, you are aware of only a small area around you," he said. "Even in most of our cities, there are birds and things to appreciate in the environment, and there can be very rich natural choruses to pay attention to. And that is being lost."
- 11 People quickly become accustomed to changes in their environments, including rising noise levels, and, over time, Fristrup fears that we will accept far worse environmental conditions than we should and forget how much quieter the world could be. "If finding peace and quiet becomes difficult enough, many, many children will grow up without the experience and I think it's a very real problem," he said.
- 12 The warning came as other scientists reported beneficial health effects from listening to natural sounds. Speaking at the same meeting, Derrick Taff, a social scientist at Pennsylvania State University, described preliminary experiments which suggest that listening to recordings from national parks, of waterfalls, birdsong and wind, helped people recover from stressful events.
- 13 In one experiment, Taff told participants who visited his lab to give an impromptu talk that would be judged by researchers standing behind a one-way mirror. Measurements of their heart rate and the stress hormone, cortisol, before and after the speech found that people calmed down faster when they listened to nature recordings than when the same audio tracks were interspersed with sounds from road traffic, aeroplanes and even normal conversation.
- 14 "We know that natural sounds are very important to people. They are some of the main reasons people visit protected areas. They want to hear the natural quiet, the birdsong, and the wind and water," Taff said. "We may be losing this as people are listening to iPods all the time but I do believe that the public is appreciative of these sounds. My advice is to go to your

Noise pollution makes us oblivious to the sound of nature

Level 3 • Advanced

protected areas and experience what you are missing.”

- 15 Why natural sounds might be calming to people is unclear but Fristrup speculates that, over millions of years of evolution, we may have come to associate the more tranquil sounds of the natural world with safety. “I suspect there’s something about these intact soundscapes that reminds

our ancestral brains of a place that’s safe, where there’s no sense of a predator nearby, and that these more cluttered soundscapes are problematic for us because we know we’ve lost that surveillance capability,” he said.

© Guardian News and Media 2015

First published in *The Guardian*, 17/02/15

3 Comprehension check

What can you remember?

1. Which organization carried out the study, where and for how long?
2. Which three US national parks are mentioned?
3. Could the scientists find anywhere that wasn’t affected by noises from human activity?
4. What three things have made us oblivious to the sounds of the natural world?
5. What in-born gift are future generations in danger of losing?
6. What fear does Taff, a social scientist, have for our children?
7. What are the reported health benefits of natural sounds?
8. What specific use might recordings of natural sounds have?
9. What does Taff advise people to do?

4 Collocations

Match the words to make collocations from the article. Then, use them to talk about the article.

- | | |
|-----------------|----------------|
| 1. noise | a. soundscapes |
| 2. learned | b. brains |
| 3. tranquil | c. hormone |
| 4. listening | d. capability |
| 5. expansive | e. deafness |
| 6. stress | f. pollution |
| 7. impromptu | g. sounds |
| 8. surveillance | h. talk |
| 9. cluttered | i. experience |
| 10. ancestral | j. habits |

Noise pollution makes us oblivious to the sound of nature

Level 3 • Advanced

5 Onomatopoeia

Onomatopoeic words such as *buzz* or *murmur* sounds like the sounds they refer to.

- a. Underline the onomatopoeic words in this excerpt from the article.

trickling water and trees rustling in the wind

- b. What other onomatopoeic words related to nature can you think of?

6 Discussion

- Can you work with the radio or TV on?
- Are you easily distracted by the noises and people around you?
- Do you listen to music or to the radio while you drive or travel?
- Do you ever wear headphones or earphones?
- Do you ever find that you've been listening to something without being aware of it?
- What kinds of sounds relax you? What kinds increase your stress levels?
- Do you ever go to protected areas to listen to, and experience, nature?
- Do you think it is becoming more difficult find 'peace and quiet' these days?

Noise pollution makes us oblivious to the sound of nature

Level 3 • Advanced

KEY

Teacher's note: If you can, from task 2 onwards, while students are doing the further tasks and reading, stream natural sounds into the classroom (from YouTube, for example). Ask at the end of the lesson whether students realized that these were playing and what effect they had.

2 Key words

1. tranquil
2. screen out
3. oblivious to
4. exacerbated
5. conditioning
6. amnesia
7. acuity
8. impromptu
9. interspersed
10. speculates
11. predator
12. cluttered

3 Comprehension check

1. the US National Park Service; at 600 sites across the US; over ten years
2. Yosemite; Yellowstone; Denali
3. No.
4. rising levels of background noise; the use of earphones to listen to music, for example; a 'learned deafness' in which we condition ourselves to ignore certain sounds
5. The gift of being able to hear things that are hundreds of metres away.
6. that they will grow up without experiencing peace and quiet
7. They help people feel calm.
8. They help people recover from stressful events.
9. go to protected areas (such as natural parks) and experience what they are missing

4 Collocations

1. f
2. e
3. g
4. j
5. i
6. c
7. h
8. d
9. a
10. b

5 Onomatopoeia

1. trickling; rustling
2. (possible answers) cheep, bark, quack (animal sounds); pitter patter (rain); rumble (thunder); crash (waves); howl (wind)